

Wildcat Creek Watershed Restoration Action Strategy

Part II: Concerns and Recommendations



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June 1999; First Draft

**Prepared by
Indiana Department of Environmental Management
Office of Water Management**

Foreword

The First Draft (June 1999) of the Watershed Restoration Action Strategy (WRAS) was reviewed internally by IDEM and revised accordingly. The Second Draft (November 1999) was reviewed by stakeholders and revised accordingly. This Third Draft (March 2000) is intended to be a living document to assist restoration and protection efforts of stakeholders in their sub-watersheds. As a "living document" information contained within the WRAS will need to be revised and updated periodically. One of the most significant revisions made after the second review was the addition of the Waterbody Assessments from the 1998 data (Attachment 2) and the Cyanide Factsheet (Attachment 3).

The Wildcat Creek WRAS is divided into two parts: Part I, Characterization and Responsibilities and Part II, Concerns and Recommendations.

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Wildcat Creek Watershed Restoration Action Strategy

Part II: Concerns and Recommendations

Part II of the Watershed Restoration Action Strategy discusses the water quality concerns identified for the Wildcat Creek watershed and lists recommended management strategies to address these concerns.

Part II includes:

Section 1	Water Quality Concerns and Priority Issues Identified by Stakeholder Groups
Section 2	Water Quality Concerns and Priority Issues Identified by State and Federal Agencies
Section 3	Identification of Impaired Waters
Section 4	Priority Issues and Recommended Management Strategies
Section 5	Future Actions and Expectations

1 Water Quality Concerns and Priority Issues Identified by Stakeholder Groups

The Wildcat Creek watershed contains many stakeholder groups that have different missions. Many of these groups have a long history of working with Wildcat Creek and its watershed. The following discussions briefly describe some of the watershed groups and lists their priorities and concerns.

Wildcat Creek Watershed Network Board

Since the beginning of IDEM's Wildcat Creek Watershed Initiative, there has been a concerted effort to collect information on the water quality concerns and priorities held by the various watershed stakeholder groups. To further this effort, the Office of Water Management initiated meetings to bring watershed stakeholder groups together in order to learn more about the watershed. These meetings, called the Wildcat Creek Watershed Network Board, are designed to increase information sharing between the various stakeholder groups and geographic regions of the watershed. After two meetings, the participants in the Board identified failing septic systems and straight septic discharge as a major water quality concern and priority. This led to the organization and presentation of the "Wildcat Creek Watershed Failed/Improper Septic System Workshop" that was held on May 19, 1999 in Kokomo, Indiana. The stakeholder efforts to address the septic issues are continuing with counties organizing septic demonstration projects to educate residents. Other water quality concerns and priority issues identified by the Wildcat Creek Watershed Network Board include:

- Lack of current and relevant data/information about the water quality of Wildcat Creek
- Streambank erosion and stabilization
- Water quality and land use education for agricultural and urban areas
- Maintaining the recreational value
- Illegal dumping of tires, appliances, and general garbage
- Log jams or obstructions contributing to flooding and streambank erosion

- Noncompliance of point source dischargers
- Pesticides from agricultural runoff
- Drainage
- Nutrient management (crop and animal waste)
- Protection of Kokomo's drinking water reservoir
- Maintaining the scenic and natural qualities of Wildcat Creek
- Flooding
- Urban development
- "Creek Abuse"
- Filling of floodplain
- Illegal clear cutting
- Greenways

Wildcat Creek Foundation

Since 1974, the Wildcat Creek Foundation has been actively striving to maintain the scenic and natural qualities of Wildcat Creek. Specifically, the Wildcat Creek Foundation focuses on portion of Wildcat Creek designated as Natural and Scenic by the State of Indiana. The Wildcat Creek Foundation acts as a land trust; enlists voluntary preservation; manages public access sites; employs conservation easements; works to reduce recreational abuse; and monitors local and state regulations. Specific water quality concerns and priorities of the Wildcat Creek Foundation include:

- Urban sprawl
- Soil/streambank erosion
- Water pollution
- Poor land management
- Recreational abuse

Wildcat Guardians

The Wildcat Guardians were formed in 1990 by a group of watershed residents that were dedicated toward improving the health and beauty of Wildcat Creek. To accomplish this task, they maintain a year-round program of guardianship and stewardship for Wildcat Creek. The water quality concerns and priorities of the Wildcat Guardians include:

- Trash dumping on the banks and in the creek
- Illegal pollutant discharges into the creek
- Streambank erosion
- Channel obstructions (log jams)
- Habitat degradation
- Maintaining recreational value of Wildcat Creek

Wildcat Creek Advisory Group

The Wildcat Creek Advisory Group was formed as part of designating a portion of Wildcat Creek as a state Scenic and Natural Stream in 1980. The Advisory Group was and is focused on the

scenic and natural portion of Wildcat Creek discussed in Section 2.6. The Advisory Group was originally comprised of riparian landowners, Indiana Farm Bureau, Carroll County Area Plan Commission, Tippecanoe County Area Plan Commission, Wildcat Canoe Club, Wildcat Park Foundation, U.S. Canoe Association, Wildcat Creek Federation, League of Women Voters of Greater Lafayette, Girl Scouts of America, and Wildcat Group-Sierra Club. The current Advisory Group was the result of a recommendation by Indiana Department of Natural Resources (IDNR) and the original Advisory Group. The composition of the Advisory Group includes many of the original groups; however, many have gone through name changes and reorganization. The Advisory Group is led by IDNR Division of Outdoor Recreation which produced "A Plan for the Preservation and Management of Wildcat Creek, January 1980." IDNR and the Advisory Group identified the following recommendations in the January 1980 document:

- Protect the Wildcat Creek corridor from inappropriate development.
- Provide better management of the public use of Wildcat Creek.
- IDNR assistance with streambank stabilization and forest management
- Provide periodic IDNR Division of Enforcement patrols on Wildcat Creek
- Provide a Seasonal Stream Specialist to IDNR for the Wildcat Creek
- Monitor recreational use
- Minimize the impact of utility crossings of Wildcat Creek

Clinton County Wildcat Creek Watershed Group

The Clinton County Wildcat Creek Watershed Group grew out of the Clinton County SWCD's locally-led process during the spring of 1998. Throughout 1998, the stakeholders in this group met regularly to discuss issues and perceived problems. Their current list of issues and perceived problems include:

- Lack of current and relevant data/information about the water quality of Wildcat Creek
- Disposal of household oils, paints, and toxics
- Pollution from residential lawn care
- Industrial pollution and NPDES noncompliance
- Air pollution from Tippecanoe County
- Failing or non-existent septic systems
- Unregulated dumping
- Failing or noncompliant sewage waste treatment systems
- Streambank and gully erosion
- Wetland destruction
- Agricultural runoff (pesticides, fertilizer, and manure)
- Confined animal feeding operations
- Topsoil erosion
- Landuse changes

Tippecanoe County Wildcat Creek Watershed Group

The Tippecanoe County Wildcat Creek Watershed Group grew out of the Tippecanoe County SWCD's locally-led process in late spring of 1998. Through the summer of 1998, the stakeholders in this group met regularly to discuss issues and refine a list of the top ten Wildcat

Creek concerns. The final top ten list of Wildcat Creek concerns, listed in order of importance, include:

- Increased runoff and subsequent erosion/siltation: conservation practices of rental farmer operations; agricultural soil erosion; sediment from all sources; and streambank erosion
- Preservation and enhancement of greenways: lack of riparian buffer; and lack of enhancement and maintenance for recreational and scenic qualities of the creek
- Lack of public and grass roots education
- Lack of coordinated resource management and Lack of a holistic approach to watershed
- Identify and reach a consensus on industrial pollution: industrial impact from Kokomo and Frankfort; mercury, PCBs, and heavy metals; and petroleum chemical runoff from asphalt based products
- Need more stringent regulations: lack of enforcement of existing regulations and need for a balance of public and private property land owner rights
- Lack of a single source for multi-information
- Farm animal impact
- Subdivision development
- Community consensus of conservation ethics

Carroll County Locally Led Conservation

At the beginning of 1997, the Carroll County SWCD convened a meeting of Carroll County stakeholders as a part of their locally led conservation program. This meeting produced four main areas for concern and for Carroll County: 1) Nutrient management; 2) Soil erosion; 3) Water quality; and 4) Public education about natural resources. These four areas came from the following list of specific concerns:

- Nutrient management
- Soil erosion
- Surface water
- Water quality and public perception
- Hogs and their impact on water quality
- Well water
- Dug well contamination
- Hoosier Heartland Corridor
- Ag public relations
- Septic systems
- Offsite sedimentation
- Natural resource education
- Stream flow blockage
- Toxic overloads
- Groundwater depletion
- Air quality
- Agricultural and residential pest management
- Sustainable agriculture

2 Water Quality Concerns and Priority Issues Identified by State and Federal Agencies

This section presents the combined efforts of state and federal agencies, and universities, such as IDEM, IDNR, USDA-Natural Resources Conservation Service, Ohio River Valley Water Sanitation Commission, Purdue University, Indiana University, Indiana Geologic Survey, and US Geological Survey, to assess water quality concerns and priority issues in the Wildcat Creek watershed. This multi-organization effort formed the basis of the Unified Watershed Assessment for Indiana.

Indiana's Unified Watershed Assessment (UWA)

The UWA workgroup gathered a wide range of water quality data that could be used to characterize Indiana's water resources. These data were used in "layers" in order to sort the 8-digit HUC watersheds according to the present condition of the water in lakes, rivers, and streams. The workgroup used only those data which concerned the water column, organisms living in the water, or the suitability of the water for supporting aquatic ecosystems. Each "layer" of information/data was partitioned by percentiles into scores. The scores ranged between 1 and 5, with a score of 1 indicative of good water quality or minimum impairment, and a score of 5 indicating heavily impacted or degraded water quality. The scoring derived through the UWA process is presented in Table 2-1.

The data layers listed in Table 2-1 can be defined as:

- Lake Fishery: Large mouth bass community information for lakes
- Stream Fishery: Small mouth bass community information for streams
- Aquatic Life Use Support: The 'livability' of the water column for aquatic life, determined from evaluation of chemical and physical water data, and assessment of aquatic life
- Fish Consumption Advisories: Site specific advisories based on current data
- Fish Index of Biotic Integrity: Based on fish community diversity and fish health
- Qualitative Habitat Evaluation Index: Measure of whether the aquatic habitat is suitable for diverse communities, based on visual observations
- Lake Trophic Scores: Indicator for the rate at which a lake is 'aging' due to inputs of nutrients and other factors
- Sediment Yield Potential: Indicator of potential sediment input to waterbodies in the watershed

The sources and additional information for these data layers include:

- Lake Fishery: From IDNR fisheries surveys of lakes and reservoirs from 1972 to 1994. Raw scores were averaged for all lakes in the watershed.
- Stream Fishery: From IDNR fisheries surveys of streams from 1970 to 1994. Raw scores were averaged for all streams in the watershed.
- Aquatic Life Use Support: IDEM, Office of Water Management, Assessment Branch
- Fish Consumption Advisories: ISDH and IDEM, Office of Water Management, Assessment Branch
- Fish Index of Biotic Integrity: IDEM, Office of Water Management, Assessment Branch

- Qualitative Habitat Evaluation Index: IDEM, Office of Water Management, Assessment Branch
- Lake Trophic Scores: Indiana Clean Lakes Program through IDEM, Office of Water Management, Assessment Branch. This score was based on information gathered from sampling conducted in the 1970's and 1980's.
- Sediment Yield Potential: U.S. Geological Survey scored the population rate of change and the 1996 Conservation Tillage Transect data. The scores were then added and normalized to produce a sediment yield indicator for each watershed.

From this scoring, it is evident that sediment yield potential and the fish consumption advisories on Wildcat Creek are key areas of concern. However, lake fishery, aquatic life support, fish index of biotic integrity, and lake trophic scores are also concerns within the Wildcat Creek watershed.

**TABLE 2-1
RESULTS OF THE UNIFIED WATERSHED ASSESSMENT
FOR WILDCAT CREEK**

Data/Information Layer	Wildcat Creek (05120107) Score
Lake Fishery	3
Stream Fishery	2
Aquatic Life Use Support	3
Fish Consumption Advisories	4
Fish Index of Biotic Integrity	3
Qualitative Habitat Evaluation Index	1
Lake Trophic Scores	3
Sediment Yield Potential	5

Note:

The UWA scores range from 1 to 5, with a score of 1 indicating good water quality and a score of 5 indicating severe impairment.

3 Identification of Impaired Waters

Section 303(d) of the Clean Water Act requires states to identify waters that do not or are not expected to meet applicable water quality standards with federal technology based standards alone. States are also required to develop a priority ranking for these waters taking into account the severity of the pollution and the designated uses of the waters. Indiana's 303(d) list was approved by EPA on February 16, 1999.

Once the Section 303(d) list and ranking of waters is completed, the states are required to develop Total Maximum Daily Loads (TMDLs) for these waters in order to achieve compliance with the water quality standards. The TMDL is an allocation that determines the point and nonpoint source (plus margin of safety) load reductions required in order for the waterbody to meet water quality standards. IDEM's Office of Water Management has and continues to perform point source waste load allocations for receiving waters. However, during the summer of 1998, extensive data were collected in the Wildcat Creek watershed in order to specifically address Section 303(d) listed streams and TMDLs in the watershed. Currently, the data from this sampling are being evaluated to determine how to address the Section 303(d) listed waterbodies. Part I of the WRAS briefly outlines IDEM's strategy for developing TMDLs.

The following Wildcat Creek watershed waterbodies are on Indiana's 1998 Clean Water Act Section 303(d) list submitted and approved by EPA 303(d) list (Figure 3-1):

- **South Fork Wildcat Creek** for cyanide violations (see Part I, Attachment 3)
- **Little Wildcat Creek/Kelly West Ditch** for dissolved oxygen violations
- **Wildcat Creek - North Fork** for PCB fish consumption advisory and ammonia, dissolved oxygen, cyanide, lead, and nitrate violations
- **Prairie Creek Ditch** for dissolved oxygen violations
- **Kokomo Creek** for PCB fish consumption advisory, and ammonia and dissolved oxygen violations
- **Kokomo Reservoir #2** for mercury fish consumption advisory

4 Priority Issues and Recommended Management Strategies

Part I provided the existing water quality information for the Wildcat Creek watershed and Part II lists priority issues and concerns from local, state, and federal stakeholders in the watershed. This section pulls together the priority issues and concerns held by all stakeholders and recommends management strategies. Underlying all discussions of priority issues and concerns is the fact that improving water quality in the Wildcat Creek watershed will also enhance the natural and recreational values of Wildcat Creek. Each subsection below focuses on a single priority issue. A summary of the recommended management strategies is provided in Appendix A of Part II.

4.1 Data\Information and Targeting

Stakeholder groups identified a need for more water quality data and information in order to prioritize and target specific areas of the Wildcat Creek watershed. In addition to targeting areas, stakeholders identified the need for more data and information about the actual impact on water quality from nonpoint sources. Success in restoring water quality in the Wildcat Creek watershed is fundamentally based on identifying the specific geographic problem areas; identifying all sources contributing to the impairment of the waterbody; and quantifying the contribution of a pollutant by each source.

Recommended Management Strategy 1: By Spring 2000, the data and assessment from the 1998 Intensive Sampling performed by the Office of Water Management will be complete. This information will be used to revise this Watershed Restoration Action Strategy in order to better prioritize and target specific areas in the Wildcat Creek watershed. In addition, the assessments will be distributed through the Wildcat Creek Watershed Network Board. The generation of the Section 303(d) list for 2000 will provide one basis for prioritization and targeting. However, prioritization and targeting by local watershed groups should also include perceived impaired locally-based beneficial uses of waterbodies. The scale at which targeting and prioritization will occur will be at the 14 digit HUC watershed area (Figure 2-2 of Part I). The targeting and prioritization will require input from stakeholders living in those geographic areas. The purpose of this prioritization and targeting is to enhance allocation of resources in the effort of improving water quality.

Recommended Management Strategy 2: Through the development of Total Maximum Daily Loads (TMDLs) for impaired waterbodies in the Wildcat Creek watershed, all sources contributing to the impairment of a waterbody will be identified and quantified in terms of their contribution to the waterbody. This includes gathering more data and information on nonpoint sources of water pollution. Throughout the TMDL process, information and feedback from watershed stakeholders will be required in order to generate appropriate allocation scenarios. The result of developing TMDLs will be an understanding of the impact of nonpoint sources on water quality in the watershed.

Recommended Management Strategy 3: As discussed in Part I, there has been little coordination between individual volunteer water quality monitoring groups within the Wildcat Creek watershed. In addition, a database that would hold the volunteer water quality monitoring data for the Wildcat Creek watershed does not exist. However, Hoosier Riverwatch and IDEM are currently working on a partnership to develop a statewide volunteer monitoring database.

4.2 Streambank Erosion and Stabilization

The cutting and erosion of streambanks within the Wildcat Creek watershed was identified by many local, state, and federal stakeholders as a major concern. This cutting and erosion increases the sediment load in waterbodies and directly impacts the scenic and recreational values of waterbodies in the Wildcat Creek watershed. Streambank cutting and erosion is often a function of many factors that include: stream energy and velocity, flooding, and land management. Increased drainage in headwater streams and ditches increases stream energies during rain fall events and often leads to increased streambank cutting and erosion downstream. Hence, this problem is not easily solved.

Recommended Management Strategy: IDEM's Office of Water Management offers their active support to the primary agency that has jurisdiction over this problem in order to facilitate the development of solutions.

Structural stabilization of specific streambank areas in the Wildcat Creek watershed may solve problems on a temporary basis. However, a comprehensive understanding of drainage, stream flows and energies, and land management practices is required to adequately approach this problem. Conservation partners (local, state, and federal) are actively working within their specific geographic areas (typically at the county level); however, this may not facilitate solving the streambank cutting and erosion problems because efforts may not be coordinated between headwater and downstream areas. For example, work in Tipton County, which contains many of the headwaters of Wildcat Creek, to increase drainage should take into account the work and efforts of downstream partners to reduce flooding and streambank cutting. Conservation efforts should be in the context of watersheds and span county boundaries in order to account for downstream impacts.

4.3 Failing Septic Systems and Straight Pipe Discharges

Local county health departments and other stakeholders have identified failing septic systems and straight pipe discharge from septic tanks as significant sources of water pollution in the Wildcat Creek watershed. Straight pipe discharges from septic tanks and septic tanks connected to drainage tiles are illegal (327 IAC 5-1-1.5; see Part I Attachment 4); however, these practices are ongoing in the Wildcat Creek watershed.

Recommended Management Strategy: On May 19, 1999, a workshop was held in Kokomo to provide information on the impacts of failed septic systems, regulations, alternative treatment systems, and financial assistance. In June 1999, a demonstration of proper septic system installation, sponsored by local stakeholders, was held in Clinton County. To further these educational efforts, the direct impact of communities discharging their septic tank effluent to waterbodies needs to be adequately characterized. This will involve coordination between the Office of Water Management, local health departments, Indiana State Department of Health, and other stakeholders. During generation of the Clean Water Act Section 303(d) list for 2000 and completion of subsequent TMDLs, illegal straight pipe discharges will be targeted for characterization and elimination. The option of choice to eliminate the illegal discharges will be a cooperative effort between homeowners and local, state, and federal stakeholders.

4.4 Water Quality - General

The Clean Water Act Section 303(d) list presented in Section 3 lists water quality limited waterbodies for the Wildcat Creek watershed. This list will be revised in 2000 to include information derived from the 1998 Intensive Sampling.

Recommended Management Strategy: The Clean Water Act requires states to complete TMDLs for waterbodies listed on the Section 303(d) list. The Office of Water Management is currently evaluating and exploring the modeling process and data needs required to complete TMDLs for the Section 303(d) listed waterbodies in the Wildcat Creek watershed. Completion of a TMDL will involve loading allocations of a pollutant to both point and nonpoint sources and the

incorporation of a "margin of safety." The Office of Water Management is currently drafting a TMDL strategy that involves stakeholder input throughout the process. The TMDL development process is in its early stages for the Wildcat Creek watershed. Contingent on IDEM's adoption and support of a TMDL strategy, implementation of the TMDL strategy in the Wildcat Creek watershed will begin by the end of 1999. This will involve meetings with stakeholder groups linked to the Section 303(d) waterbodies. As TMDLs are developed, this Watershed Restoration Action Strategy will be amended to incorporate the final TMDLs.

4.5 Fish Consumption Advisories

As noted in Part I and Part II, fish consumption advisories are clearly major concerns and priority issues within the Wildcat Creek watershed.

Recommended Management Strategy 1: The primary source of the Wildcat Creek fish consumption advisories related to PCB contamination is the geographic area impacted by the Continental Steel Corporation Superfund site. IDEM and EPA are currently carrying out plans for remediation of this site and the sediments of Wildcat Creek. Appendix A contains more information about current remediation plans and past actions.

In addition to the Continental Steel Corporation Superfund site, IDEM is also investigating areas upstream of this site to identify other possible contributions of PCBs to Wildcat Creek and Kokomo Creek.

4.6 Nonpoint Source Pollution - General

Nonpoint source pollution contributions are often difficult to assess or quantify. Currently, loadings of nonpoint source pollutants to water are often inferred by examination of land use practices, without actual measurements. In addition, the actual water quality impairments related to nonpoint source pollutants have not been well characterized in the Wildcat Creek watershed. Finally, very few regulatory control mechanisms exist to control nonpoint source pollution.

Recommended Management Strategy 1: Through the TMDL development process, the Office of Water Management will identify, assess, and quantify nonpoint source pollutant loadings to impaired waterbodies. In order to accomplish this task, the Office of Water Management will work closely with local, state, and federal stakeholders at the watershed and subwatershed level. Loading scenarios for nonpoint source pollutants will be developed by the Office of Water Management and reviewed by local, state, and federal stakeholders. Implementation of nonpoint source controls will involve a blend of funding assistance and regulatory processes, where applicable.

Recommended Management Strategy 2: Numerous funding mechanisms, such as Conservation Reserve Program, Environmental Quality Incentive Program, Lake and River Enhancement program, and 319(h) grants, exist to promote practices to reduce nonpoint source pollution in the watershed. In fact, between 1999 and 2000, there will be six active 319(h) grant projects, totaling \$443,353, working in the Wildcat Creek watershed. In addition, LARE projects have been approved for Middle Fork Wildcat Creek and Kokomo Creek. To more efficiently and effectively address nonpoint source pollution in the watershed, the prioritization

and targeting discussed previously in Part II should be used to allocate further application of resources.

4.7 Point Sources - General

During the 1998 Intensive Sampling by the Office of Water Management, several permitted dischargers were found to be discharging in excess of their permit limits. In addition, illegal point source discharges, such as tiles discharging septic tank effluent, exist in the watershed.

Recommended Management Strategy: The Permitting and Compliance Branch of the Office of Water Management is responsible for issuing and monitoring compliance of NPDES permit holders. Clearly, more emphasis and resources are needed to identify and correct illegal point sources and noncomplying point sources. Improving compliance of NPDES dischargers and identifying illegal dischargers will involve fostering a working relationship with other local, state, and federal stakeholders to monitor compliance and report unusual discharges or stream appearance. In regards to illegal discharges, the Office of Water Management will work with local, state, and federal stakeholders to identify and eliminate these sources of water pollution.

5 Future Expectations and Actions

As discussed in Part I, this Watershed Restoration Action Strategy is intended to be fluid, living document that will be revised or amended as new information becomes available. Section 5.1 discusses expectations derived from the Strategy and how progress will be measured. Specific revisions and amendments to the Watershed Restoration Action Strategy are discussed in Section 5.2.

5.1 Expectations and Measuring Progress

The Wildcat Creek Strategy provides a starting point to address water quality concerns held by local, state, and federal stakeholders. Part II provides recommended management strategies to address these concerns.

Measurement of progress is critical to the success of any plan. Water quality improvements will not take place overnight. Measuring of progress in terms of water quality will be provided through the Office of Water Management Assessment Branch's rotating basin monitoring strategy. Specifically, they will be conducting sampling again in the Upper Wabash basin, which includes the Wildcat Creek watershed, in the year 2003. This will allow an assessment of progress in improving water quality.

Appendix A contains a listing of the strategies, suggested milestones, and suggested time-frames for completion.

5.2 Expected Revisions and Amendments

This Watershed Restoration Action Strategy is intended to provide a starting point to improve water quality and measure the improvement. Hence, this document will require revisions and amendments, as new information becomes available. The future revisions and amendments have been divided into those that are expected within the next year (Section 5.2.1) and those that will occur over a long-term basis (Section 5.2.2).

5.2.1 Revisions and Amendments 1999 to 2000

The most significant revisions and amendments during 1999 and 2000 will be the addition of the water quality reports from the 1998 Intensive Sampling and the Clean Water Act Section 305(b) water quality assessment for the Wildcat Creek watershed (see Part I, Attachment 2). Local, state, and federal stakeholder comments regarding the Watershed Restoration Action Strategy will be addressed in future revisions of the document (see Part I, Attachment 1).

5.2.2 Long-Term Revisions and Amendments

The Office of Water Management is moving toward adopting a watershed management approach to solve water quality problems. Part of the watershed approach is the use of a rotating basin management cycle. The Assessment Branch of the Office of Water Management has already adopted this rotating basin cycle in its intensive monitoring and assessment of Indiana waterbodies (this is in addition to the already established fixed monitoring station monitoring which occurs on a monthly basis). Based on the cycle the Assessment Branch is using, the next intensive monitoring of the Wildcat Creek watershed will occur during the sampling season of 2003. The information from the 2003 monitoring effort will be incorporated into the Watershed Restoration Action Strategy.

In addition, the Watershed Restoration Action Strategy may be revised or amended prior to 2003, if sufficient information becomes available.